DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008367 Address: 333 Burma Road **Date Inspected:** 28-Jul-2009

City: Oakland, CA 94607

OSM Arrival Time: 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Fabrication

Summary of Items Observed: CWI Inspector: Mr. Chen Xi

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 1

This QA Inspector observed ZPMC welder Mr. Li Meng Qian, stencil 054460, is using flux cored welding procedure WPS B-T-2232-TC-U4B-F-1 to make OBG counterweight weld CW001B-PP066-001. This QA Inspector observed Mr. Li Meng Qian is qualified to make this weld. This QA Inspector observed ZPMC QC Inspector Mr. Tian Lei has recorded a welding current of 262 amps and 28.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 2

This QA Inspector observed ZPMC welder Mr. Zhang Caimei stencil 207237, is using submerged arc welding procedure WPS-B-T-2231-L2C-S-2 to make Floor Beam groove weld FB3037-001-026. This QA Inspector observed Mr. Caimei is qualified to make this weld. This QA Inspector observed ZPMC Quality Control Inspector Mr. Zhan Hai Feng has recorded a welding current of 587 amps, 30.9 volts and a welding travel speed of 572 mm

WELDING INSPECTION REPORT

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per minute. Items observed by this QA Inspector appear to comply with project specifications.

This QA Inspector observed ZPMC welder Mr. Xu Fubao, stencil 200569 is using shielded metal arc process WPS-B-T-2221-B-U2A to tack weld run off plates on OBG floor beam weld FB3008-001-003. This QA Inspector observed a welding current of approximately 160 amps. ZPMC QC Inspector Mr. Yin Dong Hai is monitoring this welding. The QA Inspector observed a welding current of approximately 160 amps. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 3

This QA Inspector observed ZPMC welder Mr. Yang Xhue, stencil 057795 is using shielded metal arc process WPS-B-T-2133 to make flux cored fillet welds in the 3G (vertical) position on Cross Beam CB10 weld SB202G-028-144. The QA Inspector measured a welding current of approximately 165 amps. QA Inspector observed the base material appears to have been preheated with a torch prior to welding. This QA Inspector observed Mr. Yang Xhue is qualified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 is using shielded metal arc process WPS-B-T-2133 to make flux cored fillet welds in the 3G (vertical) position on Cross Beam CB10 weld SB202G-027-164. The QA Inspector measured a welding current of approximately 170 amps. QA Inspector observed the base material appears to have been preheated with a torch prior to welding. This QA Inspector observed Mr. Wang Changfa is qualified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Bian Henggui, stencil 051359 is using shielded metal arc process WPS-B-T-2133 to make flux cored fillet welds in the 3G (vertical) position on Cross Beam CB10 weld SB202G-027-162. The QA Inspector measured a welding current of approximately 170 amps. QA Inspector observed the base material appears to have been preheated with a torch prior to welding. This QA Inspector observed Mr. Bian Henggui is qualified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson, Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer